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SURGICAL CASES.

COMMUNICATED TO THE SURGEON-GENERAL OF MASSACHUSETTS BY DR. JAMES P. PRINCE, SURGEON 36TH MASS. VOLS.

Wound of the Femur—Osteo-plastic Operation—Amputation.

PRIVATE BARRETT, æt. 20, wounded at the battle of Fredericksburg, Dec. 13th, in the right leg. A ball entered at the outer condyle of the femur, and, passing inward and upward, made its exit from the middle of the lower third of the thigh, splintering the compact structure of the bone on the inner side, an inch above the point of its passage. The patient being in very good condition, it was thought to be a fair case for an osteo-plastic operation, and was operated upon, Dec. 16th, by Dr. Gouley, by an anterior flap and posterior circular incision, the patella being included in the flap. This bone was split with the saw and brought in apposition with the end of the femur, the condyles and a short piece of the shaft having been already removed; but a sufficiency of bone had not been taken away, splintering of the femur still existed, and the wound made by the passage of the ball had also been included in the flap. The operation was well borne, and the case continued to do well until the sixth day, when sloughing had commenced. On the eighth day, indications of gangrene were noticeable. On the ninth day, secondary hæmorrhage from the popliteal, requiring immediate action, commenced. The tourniquet was applied, and the patient put upon the table. After being brought under an anæsthetic, a careful examination showed the propriety of amputation. I immediately proceeded to operate, but found it necessary to go as high up as the middle third, pus having burrowed nearly to that point. But little blood was lost, and the patient very readily rallied from the anæsthesia. He was removed to Washington on the same day. I saw him, on the day of his arrival in that city, about twenty-four hours after the operation. There was no unusual prostration, and the case presented every appearance of doing comparatively well. Sloughing had not continued long enough to produce constitutional depression of a dangerous character, and the gangrene was simply incipient at the time of secondary amputation. Upon examination, immediately

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after amputation, not any plastic lymph could be found deposited on the cut surfaces of bone. The femur was in a condition for necrosis up to the point of splintering. The patella was, of course, unable, of itself, to maintain life, so much of its source of nutrition having been cut off by the splitting; unquestionably no lymph could have been thrown out from that bone, and consequently the most favorable condition of the femur was necessary for the success of the operation.

Wound in the Popliteal Space—Secondary Hemorrhage—Amputation.

Augustus Kitchen, wounded December 13th, at the battle of Fredericksburg, a musket ball passing through the popliteal space, from within outwards. Upon examination, no injury of the bone or popliteal artery was discovered; motion of the limb was not impaired more than usually occurs in ordinary flesh wounds of the same extent. The patient continued to do well, and the wound presented every appearance of healing by granulation. Appetite good, pulse very nearly normal, and no hæmorrhage until Saturday, Dec. 20th, at 11, P.M., when violent hæmorrhage commenced from the inner orifice of the wound. This was consequent upon the patient having slightly extended his leg. The tourniquet was applied to the femoral, and a careful examination showed the bleeding to be from the popliteal alone. I immediately placed a ligature on the femoral at the angle formed by the sartorius and adductor magnus muscles. Upon removing the pressure above, the hæmorrhage was found to be entirely controlled; simple dressing was re-applied, and the leg was kept in a slightly flexed position. Nothing unfavorable occurred until at the expiration of thirty hours, when attention was called to slight oozing of arterial blood from the inner orifice of the wound. Pledgets of lint, soaked in a solution of persulphate of iron, were introduced, and, for the time, they arrested the hæmorrhage. Upon the removal of the outer dressing, some eight hours afterwards, arterial hæmorrhage re-commenced a little more freely. Fresh pieces of lint, saturated with the same solution, were introduced, but they did not entirely prevent a slight oozing. This continued to increase, notwithstanding the constant use of styptics and moderate pressure of the iliac. The patient became weak and the pulse fluctuating, sometimes being scarcely perceptible at the radial.

By some medical officers present and myself, it was thought unadvisable to operate, as the man would almost certainly die on the table. (This was on Tuesday, Dec. 23d.) It was, however, decided by Dr. Dougherty, Medical Director Right Grand Division, and Dr. O'Connell, Medical Director 9th Army Corps, to give the patient the benefit of an imaginary chance by operation, as he most assuredly would die without it. (The ligating of the iliac had been previously considered, but the condition of the limb precluded the possibility of

success.) He was put on the table, and the anæsthetic was carefully administered by Dr. John E. McDonald. The condition of the man was such that it became necessary to stop the inhalation several times before he succumbed to its influence.

Upon examination, it was thought advisable to amputate at the *upper part of the lower third* of the femur, pus having burrowed nearly to this point and by the side of the *popliteal*, leaving the coats of that artery in a doubtful state. Amputation was accordingly performed as expeditiously as possible (time occupied, one minute and twenty seconds). So successfully was the bleeding controlled by pressure with the fingers, that certainly the patient did not lose more than one ounce of blood during the operation. It was with great difficulty, and the constant use of stimulants and fanning, that he was rallied from the anæsthetic, after lying in a comatose state for an hour. Vomiting next ensued, and he was unable to retain a table-spoonful of fluid; half a drop of creasote was given after three hours, which controlled the emesis. He then continued to improve under brandy and beef-tea, and on Thursday, Dec. 25th, the day on which he was removed to Washington, his condition was very nearly as good as when the hæmorrhage first began. He bore the journey to General Hospital well, and when I left him in Washington, on Friday, Dec. 26th, suppuration had commenced, and the case promised to do as well as any of my primary amputations.

Examination of the removed limb revealed the following state. The ball, in its passage, had denuded the bone of its periosteum and grazed the popliteal, inflicting sufficient injury to the coats of that vessel to destroy vitality; suppuration intervening, by which the artery was entered. The hæmorrhage, occurring after the ligating of the femoral, came from branches of the profunda, they having been injured in the same manner as the popliteal, and, no doubt, sooner ruptured, than they otherwise would have been, by the increase of the arterial column, consequent upon the ligating of the femoral. A small portion of the ball was found impacted in the bone at the point where it was denuded, but so smoothly that it could not be felt by the finger or probe at previous examinations.

The specimen has been sent to Dr. Brinton, in Washington, for preservation.

PRACTICAL OBSERVATIONS ON, AND THE TREATMENT OF DIPHTHERIA, WITH ILLUSTRATIVE CASES,

By E. N. CHAPMAN, M.D., PROF. OF THERAPEUTICS, MATERIA MEDICA, &c.

[Communicated for the Boston Medical and Surgical Journal.—Continued from page 61.]

CASES XXIII. and XXIV.—A year last spring two cases of Diphtheria of much interest were treated in the Out-Door Department of the

Hospital. It was stated that four others occurred at the same time in the house where this family resided; all of which, affected in a similar manner, died. These two children, 3½ and 6 years old respectively, had, markedly, depraved constitutions, and little vital stamina. They had been complaining three or four days before presenting themselves, and now the entire fauces were covered with a foetid, bloody exudation; a dark, grumous blood distilled in drops whenever they were touched; swallowing was impeded, but not remarkably troublesome; a bloody mucus was discharged from the nose; and a swelling at the angle of the jaws, and knotted, enlarged glands were seen externally. The children, pale, badly nourished and much prostrated, had a quick, irritable and rapid pulse.

The treatment employed in the above cases was put in force; yet, from the disintegrated state of the blood, convalescence was very tedious, and the membrane did not entirely disappear before the end of the fourth week. Points on the tonsils had an ulcerated appearance, and a most disgusting fœtor was exhaled with the breath. Notwithstanding the brandy and quinine were given in larger doses than ordinary, and the free use of animal broths, the nervous and muscular weakness and prostration were greater than at the outset; and, on the disappearance of the membrane, ascites and anasarca showed themselves. The dropsy was treated by a continuation of the same remedies; and, gradually, as digestion, assimilation and nutrition were reëstablished, the water disappeared. Eventually, after a treatment of six weeks, both children were cured, and, to our knowledge, have not relapsed. It should be mentioned, that the muriated tincture of iron was given in place of the quinine for a portion of the time during convalescence.

CASES XXV. and XXVI.—In February, Dr. M. invited me to see an infant, 16 months old, in a family, in which a child the day previous had died after an illness of thirty-six hours. This child was nearly three years of age, and, laboring under symptoms like to those now shown by the infant, died with marked evidences of blood-poisoning; although no membrane could be detected in the throat, and none, as was evident from the respiration, obstructed the air-passages. I found that the infant, only taken sick the day previous, was in a state of collapse, and had the symptoms of impending dissolution—a feeble, uncertain pulse, moaning, restlessness, jactitation, and a livid, blue color of the surface;—yet, as in the other case, there was no evidence of the existence of a membrane, since none could be seen, and inspiration was not impeded. The child died during the night. Unfortunately, in neither case could an autopsy be obtained.

CASE XXVII.—The parents had one other child, a boy 6 years of age, who, for a week, suffering from a croupy cough, loss of voice and stridulous inspiration, was now, frequently, seized with suffocative paroxysms of great severity. He had been treated with anti-

mony and ipecac, in nauseating and emetic doses. I suggested the administration of brandy and quinine, and in a week the lad was well, excepting a slight bronchitis that soon disappeared.

My conclusion is, that these three children had the Diphtheria, that the two younger died from the poisoned state of the blood before the membrane showed itself; and that the recovery of the elder by the above remedies, shows not only the nature of his disease but that of the others.

CASES XXVIII. to XXXIV.—Within the last six months seven other cases of Diphtheria invading the larynx have fallen under my notice. One of these, a boy between 6 and 7 years of age, operated upon by my colleague Dr. Gilfillan, eventually recovered under the use of quinine and stimulants. Of the other six, under medical treatment alone, one failed too rapidly for any treatment to be of much avail; but the others, two of whom recovered, gave to this plan of treatment a fair trial.

CASE XXXV.—In August last, Mrs. R., 40 years of age, of a delicate constitution, was attacked with a swelling of several of the large joints simultaneously. There was great debility, a high fever, and a very rapid pulse. Under the use of colchicum, this seemingly arthritic rheumatism disappeared in three days; when, on the following morning, patches, appearing to be membranous, were discovered on the inside of the cheeks and on the tongue. Eventually these patches were developed into a membrane, which, covering the mouth, extended into the fauces. This membrane fell in seven days and was not renewed; upon which the swelling of the joints returned as severely as at first. In addition, there were severe neuralgic pains shooting down the main nervous trunks, and a profuse, drenching perspiration. As, in ten or twelve days, the rheumatism was got the better of, the want of muscular power was very observable; from this condition, however, she rapidly recovered, and has since continued in the enjoyment of good health. The treatment consisted, on the appearance of Diphtheria, of brandy and quinine; but after the first three days the stimulant was alone given, excepting when the membrane had about disappeared I gave her for 24 hours the tartrate of potassa and soda, which renewed the membrane in the mouth and made the patient worse.

CASE XXXVI.—Mrs C., æt. 30, spare, anæmic and greatly debilitated from nursing, was taken with the Diphtheria Jan. 1st, 1863. On the evening of the 4th, one tonsil, which had suppurated, discharged a large amount of pus. The following day there was paralysis of all her limbs, which were racked with violent neuralgic pain, shooting down the main nervous trunks. In several places on her arms and legs erythematic spots appeared, but did not remain more than thirty-six hours. On the 6th, the right arm and left leg were free of pain and could be moved in all directions; but as yet the power in the muscles was feeble. On the 7th a like change, in her

left arm and right leg, took place suddenly; an impression came over her that she could move them, and instantly the muscles obeyed her will. On the next day the patient could stand; on the second could walk, from which time recovery was rapid. She took from the first the following prescription. *R.* Cinchonæ sulph., gr. xxv.; acidi sulph. a., q. s.; aquæ font., f ʒ iij. *M. S.* A teaspoonful every second hour, with half an ounce of whiskey. On the 8th the cinchonia was omitted, but the stimulant was continued in the same dose every third hour.

CASE XXXVII.—In July last, a soldier from Gen. McClellan's Army of the Peninsula was, with 123 others, admitted into the hospital. He had been sick for some weeks with the typhoid fever, from which having recovered, he now suffered from debility and a depraved condition of the blood. In the first week of August he was attacked with the Diphtheria; and, in six days, under the use of cinchona and whiskey in doses similar to the last case, the engorgement of the throat abated, the membrane began to fall, and convalescence was commencing; when, on my leaving the city for ten days, this treatment was interrupted, and one by the chlorate of potash substituted. The diphtheritic symptoms gradually resumed their former severity; and, the second day before my return, he drank at a draught half a pint of a solution containing two drachms of the potash, which was designed to be used in the twenty-four hours. The next morning gastric symptoms showed themselves, which, when I saw the man, indicated violent gastritis—hardness, tenseness and acute tenderness over the stomach, and a rejection of all food or medicine. The matters vomited consisted of ropy mucus, streaked, at times, with blood. The fauces were in the same condition as in the beginning, but there was much greater difficulty in swallowing.

It was more than two weeks before the inflammation of the stomach was subdued; and then the paralysis of the fauces, which had gradually been getting more decided, was almost complete, rendering the swallowing, more especially of fluids, nearly impracticable. In a few days there was a loss of taste and smell, and directly, in the face and upper portion of the chest, a want of feeling which gradually crept down the trunk and arms, and was followed by a lessened power in the muscles. Taste, smell and the power of swallowing were much improved in a couple of weeks, when the arms became powerless and the same numbness passed down to the lower parts of the body. In a short period all the extremities, with the spinal muscles, were paralyzed, rendering him perfectly helpless. A severe pain in the right ear was followed by total deafness on that side. His sight became imperfect—all objects were indistinct and surrounded by a haze, and small ones, intently looked at for a moment, were blurred and run together. He was presbyopic, as was shown by his ability to tell large letters held far from him, which he could

not make out at the ordinary distance. Such was his condition in the middle of October. By the 1st of November he had regained the special senses in perfection, and also the power in the spinal muscles and those of the arm, but not of the forearm. Now for a month his condition remained without improvement, though nutrients, cinchonia and whiskey, which had been constantly given since there was an ability to swallow, were still assiduously administered. Now all medicine except the pyrophosphate of iron was omitted, and this was used in four-grain doses three times a day. It had the most happy and prompt effect—the power of motion returning in the parts first paralyzed, and last of all in the toes. When he began to sit up, which was before there was any improvement in the legs, there was great muscular weakness observed in the heart, rendering the recumbent posture necessary as a matter of prudence. When he had recovered sufficiently to stand, this feebleness of the heart's action was overcome. In four weeks after commencing the use of the pyrophosphate of iron he was able to walk when supported, in five could do so without assistance, and in six the recovery from paralysis was complete.

[To be continued.]

CASES OF THORACIC EFFUSION RELIEVED BY THORACENTESIS.

By WILLIAM WARREN GREENE, M.D.

[Communicated for the Boston Medical and Surgical Journal.—Concluded from page 55.]

CASE III.—Martha Berry, of Gray, Maine, aged 10 years, was attacked with typhoid fever in the early part of July, 1861. At the end of three weeks she was convalescent. In the fourth week, however, she had a slight attack of pleurisy. I saw her twice at this time, finding her, at the last visit, relieved, with no signs of effusion. I was now attacked with fever myself, which confined me till the middle of September. During this time Dr. Anderson, of Gray, saw her several times.

Sept. 27th, her father requested me to see her, saying she "seemed to have a slow fever." I found her very much emaciated, with hectic fever, hurried, oppressed breathing, harassing cough, with no expectoration. Left side motionless in respiration, enlarged two inches; intercostal spaces bulging, and yielding perfectly flat percussion sounds everywhere except over the clavicle. Heart displaced to right side. No respiratory sound, except just under clavicle a slight blowing, and it was doubtful whether this was not transmitted from the right side.

On the 30th of September, with the assistance of students Frothingham and Collins, I opened the chest and evacuated a quart of creamy pus. As the lung had now expanded and chest contracted all it was inclined to do, I closed the opening, promising to repeat

the operation in a few days. She was greatly relieved. On visiting her the fourth day after the operation, for the purpose of repeating it, I was informed that, twenty-four hours before, the wound opened, and had been discharging profusely ever since. On examination, I found pus of the same quality issuing from the wound, and occasionally *air entering* the wound upon inspiration.

Oct. 10th, the lung had expanded to nearly two thirds of its volume; the heart occupied nearly its natural position, and the wound still discharging; cough less, expectoration none; breathed easy; slept well; no chills nor sweats; appetite good; strength rapidly improving. She now moved out of town, and I lost sight of her till, in August, 1862, the family came back to town. Unaware of the fact, as I was riding past the house, a plump little girl came towards my carriage, as if to speak. I stopped, but did not recognize her, when, looking very much surprised, she said, "Why Doctor, don't you know me? I am the little girl you tapped." And so she was, looking the picture of health. She is perfectly well. No cough, pain or soreness. Lung acts very well, although the chest is somewhat shrunken, crippling the organ a little at its base. Heart in proper position.

CASE IV.—Jan. 14th, 1862, was called to see Geo. Whitman, of New Gloucester, Me. In June previous he had submitted to an operation for the removal of an encephaloid testicle, from which he rallied very well, and was able to attend to his business until October, when he began to lose strength, and noticed small tumors in the folds of the nates and groin, which had steadily increased in size, with but little pain or tenderness.

In November, he began to have some difficulty in breathing, attended with an unavailing cough. I found him, emaciated and weak, yet able to walk about the room, but suffering extremely from dyspnoea, and an "indescribable distress" through the chest. He had not been able to lie down but a few moments at a time for many days, and could not sleep at all in the recumbent posture. The cough was not very severe; no expectoration.

He said that he had suffered from "pleurisy fever" twice in his life, the last time many years since; did not remember how many. Did not know whether, at the time, there was any effusion, or whether, since, there had been any shrinking of either side. In fact, did not know *certainly* which side was affected, but was very sure that it was the left side, both times.

I found the left side of the chest measuring a trifle more than the right, certainly not more than one fourth of an inch; respiratory movement almost abolished; no bulging of intercostal spaces. The upper part of the chest yielded the normal vesicular resonance on percussion. From the third rib downward, however, this resonance *gradually* diminished, and at the lower part of the chest gave place to perfect flatness. *Change of position produced no change in the*

line of dulness. No vocal fremitus. Over the resonant portion of the lung the respiratory murmur was tolerably distinct; below this, no sound whatever. No bronchophony. No heart-sounds in their proper place, but distinct, as was its impulse, on the right side of the sternum.

He said he had sent for me for two reasons. First, for the removal of the tumors, if I thought proper, as they were now rapidly increasing in size, becoming very painful, and interfering with the movements of the limbs, and also, as he thought, with the action of the bowels and bladder;—this was explained by a rectal examination, which disclosed the same disease involving the rectum as far as the finger could reach—second, to relieve, if possible, the thoracic distress, so that he might lie down and rest.

I of course advised him of the futility of any operative interference with the morbid growths, and suggested the presence of liquid in the left pleural cavity as explaining *principally* his suffering in this region, and the propriety of giving it exit.

The diagnosis surprised the patient and his friends very much, as the physician previously in attendance, dismissed before I was called, had repeatedly examined the side without coming to any such conclusion; and, as he had quite a dread of being "tapped," I did not press the matter, but at his request gave him "a day or two to think of it." In the mean time some of the friends consulted the former physician about the matter, and he told them emphatically that I was entirely mistaken in diagnosis, and that opening the chest was perfectly unwarrantable, &c.

I may here state, parenthetically, that an uncle of the patient had, as proved by an autopsy, complete transposition of all the viscera, a fact which made the friends more nervous, they thinking that this might be a parallel case, and thus the position of the heart be explained.

Finding, at my next visit, the family in an unsettled state, although consenting to the operation, I requested my friend, Dr. Tewksbury, of Portland, to see the case with me. He fully concurred in my opinion, and I accordingly, with the assistance of Dr. T., performed thoracentesis and evacuated two quarts of bloody serum. During the operation the heart moved back to its natural position, the thoracic wall collapsed considerably, accompanied with an apparent slight expansion of the lung. He was completely relieved by the operation of all chest symptoms, except slight cough; could lie in any position and sleep quietly. Nor was there any return of these symptoms before his death, which occurred some weeks after, in consequence of the intra-pelvic disease. No cancer-cells could be detected in the removed fluid by the microscope. No autopsy was obtained.

I have selected the above cases for publication, from the conviction that each presented points of unusual interest, either pathological, diagnostic or therapeutic, which will suggest themselves to the reader.

I cannot but feel that the profession, as a whole, are not sufficiently alive to the importance of *early* operative interference in these cases; that many lungs are ruined and lives lost by unwarrantable tampering with medication, that would be easily saved by an operation long ago demonstrated to be feasible and safe.

My rule is, whenever a case of pleuritic effusion does not yield readily and *rapidly* to medical treatment, operate. In operating many times I have never had any cause for regret, except, in some cases, that it was not done earlier. I have never seen any *shock* from the operation. In a little boy of 8 years, I some years since removed seventy ounces of serum from his right pleural cavity in the morning, and in the afternoon he was walking about the room. In another, 6 years old—a little boy in Poland, Me., whom Dr. Roberts, of Bangor, saw with me—from whose right chest I drew twelve ounces of pus, afterward injecting, first, warm water and withdrawing it, then dilute tincture of iodine, the little fellow sat up in bed immediately after, called for his playthings, and used them with more zest than before the operation. Therefore the severity of the procedure is no excuse for its omission or delay.

The instrument which I use, by preference, is Dr. Morrill Wyman's. Especially is it to be preferred when desirable to inject the cavity or to prevent all ingress of air. From this latter accident, however, I have never seen any apparent harm; yet in simple serous effusion I should be anxious to avoid it.

In a case upon which I operated nearly three years ago for Dr. James Webb, of Bridgeton, Me., I removed from the right pleural cavity of a man a gallon of serum with a simple exploring trocar, not being apprised of the nature of the case when called, and so not having the proper instrument with me. In this case air entered the chest several times during the latter part of the operation. The lung, however, expanded well, and just before withdrawing the cannula I stopped it with my finger during inspiration, opening it during expiration, and thus in a few respirations the air was expelled. The opening was, of course, valvular. The case made a fine recovery.

Pittsfield, Mass., January 15th, 1863.

MICHIGAN ASYLUM FOR THE INSANE.—We learn from the biennial report of the board of trustees for 1861–62, that at the date of the previous report, there remained in the institution 109 patients; 187 have since been admitted, making the total number treated during the biennial period, 296. Of this number 63 were discharged *recovered*, 25 left the Asylum more or less *improved*, several sufficiently so to resume their accustomed duties; 26 were returned to their friends or were removed by the county authorities *unimproved*—a large proportion, in order to make room for more recent and urgent cases; 27 have *died*, and 157 remain under treatment.

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BERKSHIRE DISTRICT MEDICAL SOCIETY.
BY FRANK A. CADY, M.D., SECRETARY.

The last monthly meeting of the Berkshire District Medical Society was held in the Chemical Hall of the Medical College, Jan. 28th, 1863. Present—Drs. H. H. Childs, Jennings, Smith, Miller, Allen, Greene, Holcombe, Lucas, Drown, Holmes, Ransom, Pratt, Bostwick and Cady. The President, Dr. Jennings, in the chair.

The record of the previous meeting was read and accepted.

The report of cases being called for, Dr. HOLCOMBE, of Lee, described a case of pneumonia, which passed through the usual stages, presenting all the ordinary physical and rational signs, except that neither cough nor expectoration appeared during the whole course of the disease. The patient recovered, but the convalescence was much slower than is usual in this disease. Dr. H. also reported a case of typhoid fever (in a young woman) in which, during the first two weeks, the symptoms were not unlike those ordinarily present in the disease, and with the pulse at no time exceeding 110 per minute. At the expiration of that time she was suddenly attacked with severe pain in the region of the ileo-cæcal valve, which it required large doses of opium to subdue. After the subsidence of the pain, no symptoms of unusual intensity appeared until the thirtieth day, when she had all the well-marked evidences of perforation—agonizing pain, beginning in the right iliac fossæ and extending over the whole abdomen; pinched features, quick and feeble pulse, exquisite tenderness on pressure, tympanites, thighs flexed on abdomen, nausea and vomiting, cold extremities, with great prostration of the vital powers. Under the administration of stimulants in large quantities, and continued hot applications to the surface, the patient rallied. The collapse returned every twenty-four hours for six successive days, in the last of which the patient died. Dr. H. thought it very unusual for a patient to survive so long after the unmistakable evidences of perforation.

Dr. CADY remarked, that in the few cases of intestinal perforation observed by himself, when the contents of the bowels had escaped into the peritoneal cavity, death had ensued, *generally* within forty-eight, and *always* within sixty hours, after the first evidence of perforation had appeared.

Dr. A. M. SMITH reported several cases of illness which had occurred in the family of Mr. Wm. Noble, peculiar, not only in the symptoms presented, but also in the number of persons attacked and the persistency with which the disease, in each case, resisted treatment. The first was that of a young lady, who was taken with what appeared to be bilious derangement—sallowiness of skin and yellow sclerotic. The tongue was buffy in the centre and red upon the edges; bowels constipated; slight tenderness over the epigastrium and right hypochondrium. Vomiting occurred on the second day and continued several days, but was after a time relieved by small doses of creasote—the other symptoms by alteratives. Several members of the family were attacked in nearly the same manner, and were relieved by treatment not unlike that pursued in the first case. Mr. N. was more ill than any of the others. For six weeks he was unable to retain any food

in the stomach, and was supported by injections of broth. Several persons who came to the house to take care of the sick were, after a time, attacked in the same way, and only recovered after returning to their own homes. The vomiting, in all these cases, was more uniformly relieved by small doses of creasote than by any other remedy. The number of persons thus affected (10) in this house indicated some local poison. The cellar was wet, and contained decaying vegetable matter. Paper, found by analysis to contain arsenic, covered several walls in the house. Dr. S. was not certain that the real cause of the trouble had yet been ascertained.

Dr. CHILDS referred to a case not unlike those reported by Dr. S., which occurred in the west part of the town several years ago, when many members of the family died, and he was obliged to remove the surviving patients before any improvement took place in them.

Dr. GREENE presented a multilocular tumor of the ovary, with the following history. The patient, 24 years of age, unmarried, had complete suppression of the menses from Sept. 12th, 1859, till Dec. 17th following, when she had severe menorrhagia, lasting several days. Thenceforward she menstruated at irregular intervals, varying from two to ten weeks, until October, 1861, between which date and Feb. 20th, 1862, she had again complete suppression. Up to this time there was no disturbance of health. She attended as usual to her business, that of a milliner. She now (Feb. 20th, 1862) began to have a moderate discharge of blood from the vagina, which continued without interruption, and with but slight variation in amount, until June 9th. About the 1st of March she noticed "some bloating up of the bowels," which gradually increased until the 1st of April, when she consulted Dr. Tewksbury, of Portland, Me. Owing to her reluctance, however, no local examination was made till about the middle of May, when Drs. Tewksbury and Wood, of Portland, examined her repeatedly and thoroughly. They decided that there was some abnormal growth in the abdomen, the character of which was so masked by ascitic effusion as to render it doubtful whether it was ovarian or uterine—Dr. T. inclining to the former, and Dr. W. to the latter opinion. Finding her strength failing, she left her work, but insisted that she felt perfectly well, with the exception of a sensation of weight in the abdomen. The first of June she rode twenty miles in a carriage, and two days after Dr. G. saw her, and found her with symptoms of acute peritonitis. These readily yielded to opium, but the abdominal distension increased to such a degree as to demand paracentesis, which Dr. G. performed on the fifth day, evacuating two gallons of highly albuminous fluid. The tumor now pressed upon the canula, so that no more could be withdrawn, although much still remained. She was much relieved by the operation. An examination of the abdomen at this time revealed a firm mass, of regular outline to the touch, somewhat movable, a little to the right of the median line, over which the abdominal walls glided freely. It could not be reached *per vaginam*. The uterus was normal in its measurements, feel and position, except being slightly elevated, and floated a little on the sound, without imparting any apparent motion to the tumor. The speculum gave no light upon the origin of the sanguinolent discharge, except that it was intra-uterine; os, perfectly healthy. The next day (June 12th) she was very comfortable, and anxious for an operation for the removal

of the tumor, which was promised her after she rallied a little. She was shortly attacked with acute pain, tympanites, vomiting, &c., sunk, and died in twenty-four hours.

Autopsy, twenty-four hours *post mortem*, revealed a multilocular tumor of the right ovary, one cyst of which had ruptured, discharging its contents into the peritoneal cavity. Its pedicle was the broad ligament simply, having no adhesions, although elsewhere the peritoneum was coated with an abundant exudation of recent lymph, which had agglutinated the other viscera together. The contents of the tumor was a thick fluid, resembling precisely the white of an egg. Weight of tumor, when emptied of its contents, 5½ pounds. Peritoneal cavity contained ten quarts of fluid, similar to that obtained by tapping. *Uterus and left ovary perfectly healthy.* Dr. Greene remarked that the peculiar points of interest were, the persistent uterine hæmorrhage, till within a very few days of death, with no uterine disease, the early rupture of the cyst, in a case of this character, and the entire absence of adhesions of the tumor after repeated attacks of peritonitis.

Dr. Greene also reported a case of cataract in a person 74 years of age, in which, in one eye, the cataract was hard and relieved by couching; and in the other was soft and removed by solution. Dr. G. also reported a case of necrosis of the inferior maxilla, in which there had been no acute symptoms; also a case of coxalgia, which had been greatly relieved by the application of a splint, which removed the pressure of the head of the bone in the socket.

[To be concluded.]

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, FEBRUARY 26, 1863.

HEARING BEFORE THE AGRICULTURAL COMMITTEE OF THE LEGISLATURE UPON THE ADULTERATION OF MILK.—Next to good water there is no article of daily consumption of more importance to a community than a sufficient supply of pure milk. It is equally a luxury and a necessity, for containing, as it alone does, in a fluid form all the elements essential to the daily wants of the human system, it not only enters into the composition of a large proportion of the dishes which form our daily food, but at certain stages of life and in some diseases, both of infancy and adult age, it is the only means, in fact, of continuing individual existence. With its rich golden *oil*, its *sugar*, sweet but not insipid, its casein stored with *nitrogen* for the tissues, its *salts* so carefully selected for our bony frames, and its water of dilution so necessary for the catalytic processes of life, it comes to us all ready to supply strength to the starved blood, and to circulate unaided and almost unchanged within us at times when our organs are either too newly formed and tender, or else too tired or too much abused to undertake the task of extracting from crude materials sufficient supplies of the above indispensable elements for the continuance of life. To many a poor child living through the summer heats in the city haunts of cholera infantum it brings, as it were, the essence of sweet meadows and breezy pastures, so full of new life to such little patients. The rich

may have it pure in town, or go to seek it in the country; but to the poor both are alike impossible, and hence many women become mothers only to see their half-nourished offspring struggle through a few months of a miserable existence, to die at last merely from the want of an abundant diet of pure milk. During the past two summers more than 500 children have died of cholera infantum in this city, nearly all of whom, under more favorable circumstances of residence and food, might have been saved to the community. How often is the physician's advice to the poor mother to wean her infant met by the question, "how can I be sure of getting good milk for it?" Without this supply the child cannot be reared, and yet, we are sorry to be obliged to say it, the chances are against her obtaining it from the sources to which she will apply, considering the numerous hands through which it passes on its way from the country to the consumer. First, the cow, in whom at least there is no deceit, gives down her unadulterated, fragrant secretion to the milkmaid's (too often, in these days, of the masculine sex) fingers, then the farmer sells it to the collector, who delivers it to the milk agent, who brings it upon the milk train to Boston, of whom the milkman, buying a certain number of cans, sells in turn from his wagon to the retail dealer, to whom, finally, our poor Irish wife resorts for her daily pint. There are, as we shall see, more direct channels than this, but they do not flow through her section of the city. Until all men learn to become honest, it is apparent then that water, so long as it remains at its present remunerative price, may gain access to the cans, even more than once, before it finally reaches the consumer, and until that time it becomes necessary for the law to protect the sick and the ignorant, both against mercenary thoughtlessness and reckless depravity.

It is with much pleasure, then, that we see that the Agricultural Committee of the Legislature is about to reconsider the present State law, for the purpose of making it, if possible, more stringent. We are confident that much good may be accomplished by such a movement, especially as it is the farmers who in this case seek protection and redress. Our experience before legislative committees within the past few years has unfortunately taught us not to hope for much sympathetic action from the country members, either in educational or hygienic matters in which the city has a strong interest, and accordingly we are rejoiced to see that it is the country which feels itself the sufferer in this instance, and in its tenderest part, for every gallon of water sold as milk diminishes the demand for the real article just to the same extent. There is some chance for the success of humanitarian projects if they only coincide with strong monied interests, and the legislature will not close its ears to the petitions of hygiene and science, if they are borne upwards by the demands of so powerful a cliency as the agricultural. Poor Bridget cannot fail of obtaining some protection against knavery, if the same system of fraud robs also stout Farmer Dairyman.

The following is the present law of the Commonwealth, and the city ordinance, concerning the adulteration of milk.

Be it enacted, &c., as follows:

SECTION 148. The Mayor and Aldermen of cities shall, and the Selectmen of towns may, annually appoint one or more persons, to be Inspectors of Milk, for their respective places, who shall, before entering upon the duties of their offices,

be sworn. Each Inspector shall give notice of his appointment by publishing the same two weeks in a newspaper published in his city or town, or if no newspaper is published therein, by posting up such notice in two or more public places in such town.

SECT. 149. The Inspectors shall keep an office and books for the purpose of recording the names and places of business of all persons engaged in the sale of milk within their limits. They may enter any place where milk is stored or kept for sale, and all carriages used for the conveyance of milk; and whenever they have reason to believe any milk found therein is adulterated, they shall take specimens thereof and cause the same to be analyzed, or otherwise satisfactorily tested, the result of which they shall preserve as evidence, and shall prosecute for all violations of the provisions of Section one hundred and fifty-one. They shall receive such compensation as the Mayor and Aldermen or Selectmen determine.

SECT. 150. All measures, cans, or other vessels used in the sale, or buying at wholesale, of milk, shall be annually sealed by the Sealer of Weights and Measures, by Wine measure; and all cans so used shall be marked by the Sealer with figures showing the quantity which they hold.

SECT. 151. Whoever neglects to cause his name and place of business to be recorded in the Inspector's books, and his name legibly placed upon all carriages used by him in the conveyance of milk, before engaging in the sale thereof, and whoever sells, or buys at wholesale, milk by any other measures, cans, or vessels than those sealed as before provided, or adulterates, by water or otherwise, milk to be sold in this State, or, being recorded in the books of the Inspector as a dealer in milk, conveys from place to place, or knowingly sells or causes to be sold adulterated or unwholesome milk, shall forfeit twenty dollars for each offence. And whoever offers for sale milk produced from cows fed upon the refuse of breweries or distilleries, or any substance deleterious to the quality of the milk, shall forfeit twenty-five dollars for the first, and fifty dollars for every subsequent offence.

AN ORDINANCE CONCERNING INSPECTION OF MILK.

Be it ordained by the Aldermen and Common Council of the City of Boston in City Council assembled.

SECTION 1. The Mayor and Aldermen shall, upon the passage of this ordinance, and thereafterwards annually on the first Monday of January, or within sixty days thereafter, or whenever the office shall be vacant, appoint an Inspector of Milk, who shall be removable at the pleasure of the Mayor, be sworn to the faithful performance of his duty, receive such compensation for his services, in addition to the fines and forfeitures which he shall collect, as the City Council shall determine, and hold his office until another shall be appointed in his place, unless sooner removed as aforesaid.

SECT. 2. It shall be the duty of the said Inspector to give notice of his appointment in the newspapers selected for the city advertising, and to request therein all persons selling milk within the city to conform to all the requirements of the law and of this ordinance; and to invite all persons knowing of violations of the laws relating to the sale of milk to report the same to him; to prosecute before the proper tribunal all such violations as shall come to his knowledge; and to keep proper books of account and record of all matters pertaining to his office, which said books shall always be open to the inspection of the Mayor and each of the Aldermen, and shall be transmitted to his successor in office.

In Board of Aldermen, June 7, 1859.

Passed.

Sent down for concurrence.

In Common Council, June 9, 1859.

Concurred.

Approved, June 22, 1859.

SILAS PEIRCE, *Chairman.*

J. P. BRADLEE, *President.*

F. W. LINCOLN, *Mayor.*

Let us see now what have been the practical results of a law apparently so well adapted to protect the public.

Section 148. In accordance with this clause our city appointed an Inspector of Milk in 1859, but, so far as we can learn, with one or two

exceptions this was the only appointment made in the State, and in Boston alone has there been any persistent and faithful attempt made to carry into effect the spirit of the law. Since that time there have been entered in the Police Court, upon complaint of this officer, nearly one hundred prosecutions of parties breaking this law in some of its parts, by far the greater number of whom, although clearly guilty, have escaped punishment. This has been owing chiefly to the fact that the police magistrates have decided that several portions of Section 151 are unconstitutional, or in some way improper, and have accordingly let the guilty off unpunished. We do not think it advisable to make public, even in a professional journal, all the weak points of the statute, so long as it is the only one, however powerless, to protect the community against the wholesale adulteration practised in this city, but we will state some of the difficulties against which the prosecuting officer has to contend.

Section 151 states that any one who "conveys from place to place," &c., shall forfeit \$20 for each offence. What more easy then than for the Inspector to take a can from a suspected cart, have it analyzed, and, if found adulterated, to get a conviction at once? That would appear to be justice certainly. Not so, however. The judge, who does not hesitate to sentence thirty poor devils off hand in an hour to the various places of criminal confinement on the mere statement of a policeman, or even without such testimony, rules that the clause is in opposition to the liberty of the people, that a man may carry water, swill, arsenic, or any other poison he chooses in a milk-can or milk-cart, and nobody has a right to interfere with him. "Complaint and accused discharged." The Inspector then says, it is evident I can convict this fellow only by taking a specimen of the milk from some house where he has left it. Accordingly he goes to some private house, takes a specimen of the milk, or has it voluntarily brought to him by the father of the family, has it analyzed, finds it half water, and enters a complaint before the police criminal court. The case comes to trial, the gentleman is summoned as a witness. "Do you buy milk of the accused?" "I do." "Did he leave the specimen in question at your house?" "He did." "How do you know this?" "Why the cook says he did." "Did he leave it in a can?" "No; it was turned into a vessel." "Can you swear there was no water in that vessel at the time, and that none was added afterwards?" "No." "Case discharged." The next time the Inspector has the cook summoned also. "Cook, did you receive the specimen from the accused in person?" "No, sir, he always leaves the can outside the door before I get up." "Can you prove that no one came along and turned water into that can while there?" "No, sir." "Case discharged." It is evident, then, that no private gentleman can obtain redress without bringing his whole family into the Police Court, and that the Inspector must seek other kind of testimony, if he is anxious to obtain a conviction. He accordingly traces this privileged and well-protected character to some retail dealer, to whom he sells daily several cans of "half and half." The shop-keeper complains that the milk is bad. A specimen is taken, analyzed by a chemist, and found to be adulterated 50 per cent. with water. The parties are summoned to appear. The chemist testifies to the bad character of the milk. The shop-keeper is asked, "Do you buy milk of the accused?"

"Yes." "Did you on this day?" "Yes." "Do you buy milk of anybody else?" "I do at times." "Did you on the day in question?" "I did not, my boy was in the shop; the cans are left upon the door-step outside." "Were any more cans left that day than were marked upon the milk card of the accused?" "No." The boy is called; "couldn't swear that some other milk-man might not have left milk that day, but didn't see any." "Complaint not sustained."

Is it strange, then, that out of 48 prosecutions for the sale of adulterated milk since 1859, the Inspector has succeeded in gaining only 16 convictions, a portion of which were "pleaded guilty" without a trial? There can be no question, then, about the necessity of reform; but we hope that the Committee having the matter in charge will see that the measures they adopt, however stringent, first receive the sanction of the judges, before recommending them to the law-makers of the General Court. The only limit to the severity of the statutes should be the possibility of enforcing them. If it is unconstitutional or illegal to prosecute a milk-man for carrying poisoned milk in his cart, the community has certainly a right to insist that the city shall refuse a license to such a person. The law should, moreover, enforce a registration every year, for milk routes are constantly changing hands, and a milkman may under the present law leave and re-enter the business half a dozen times without giving any notice of such change. Neither should it be necessary for the Inspector to prove that the party accused sold adulterated milk *knowingly*, that is, should be obliged first to give him warning. It is not considered necessary first to serve a special notice upon a thief of the illegality of the action, before we can convict him of stealing our property. Let the milk-man look to the parties of whom he has his milk, if himself innocent, for satisfaction. The first offence should be made \$100, and we give this as the opinion of one of the judges of the Superior Court, and for the second offence take away the man's license, after which, if he is found engaged in the milk trade, let him survey the former scenes of his adulteration from the windows of the State Prison. Cochituate water sold at 4 cents a quart is a very profitable business, and \$20 thus paid is not found very burdensome, especially when the convicted party finds the purses of all his guilty associates open to make common cause in fighting the case and paying costs.

We would not for a moment be thought to imply, from anything we have written, that Boston milk is, as a general rule, bad milk; on the contrary, from our experience, we do not hesitate to pronounce it of a superior quality to that of most large cities. Most of the specimens of pure milk we have examined from various carts have contained 8.6 per cent. of casein and butter, and only 85 per cent. of water. Its flavor, color and body of cream are generally excellent, and its character is a credit both to the honesty and capability of its producers. Such is the nature of this important article as it is found in the best dairies about Boston, and in this state it is delivered to a great proportion of the more wealthy classes of the inhabitants of this city.

There are two great sources or channels by which the immense supply of the city is daily replenished, namely: the carts, which bring it direct from the dairies in the immediate vicinity of Boston, and the milk-trains which come over the various railroads and drain the surplus

supplies from the more distant towns in Massachusetts and New Hampshire. The former are situated principally in Lexington, Waltham, Dedham, Roxbury, Quincy, Dorchester, Milton, and in fact nearly every town within a radius of fifteen miles contributes its share, much or little, to the city's consumption. Most of the large dairy farmers in these places keep from twenty to forty cows, and own one or two carts, which leave home at a very early hour in the morning in order to supply their customers before breakfast, so far as possible. The milk they thus distribute is accordingly that of the preceding night and morning at this season, and is sold to the consumer for 5 or 6 cents a quart. Lexington, for instance, sends every morning to Boston more than 1000 gallons in this way, five sixths of which amount is raised in that town. As some of our readers may like to know how such farmers treat the animated machine from which our household milk is obtained, we give extracts from a letter recently received from one of the largest proprietors in that town.

"The amount produced in summer and winter is about the same. The average yield of a dairy of cows for ten and a half months, well fed, will not vary much from seven quarts per day to a cow. The other month and a half of the year she is kept dry, it being the time previous to dropping her calf. The cows are usually turned out to grass about the first of June, being stabled every night, and kept there until the first of November, being fed a portion of the time, morning and evening, with green fodder, cut up and brought into them as they may require it. To produce a satisfactory amount of milk, nature has to be supported, and hence it is very poor economy to stint the feed of a cow, for it will be scarce ten hours before you will be reminded of it in the decrease of her milk. I have 26 cows, 18 of which are in milk. I feed the best of English fodder, together with grain of different kinds, such as corn meal, cotton seed, shorts, barley, rye and roots, believing a change of diet as conducive to health in the animal as in man, and without it you may look in vain for the realization of your expectations. . . . I think if the city would be less complaisant towards adulterators of milk and more vigilant in ferreting them out and bringing them to justice, to say the least, they would be doing an act of justice to the raiser and consumer of milk."

A large city, however, requires a large country to satisfy the calls of its stomach alone—all England is hardly large enough to feed London—and accordingly we are obliged to go farther from home, even to other States, to obtain at least two thirds of our daily supply. The largest milk-trains come in over the Fitchburg, Lowell and Worcester railroads, bringing their contributions from the large dairy districts through which they pass. The Worcester Railroad, or, as it is better known, the Westboro' milk, is nearly all gathered from the towns of Westboro', Northboro' and Southboro'. The train starts at some hour in the night, so as to reach the city very early in the morning, when it is met by the various carriers, who load their carts and distribute immediately to their customers the night and morning milk of the preceding day. Upon the Lowell and Fitchburg roads the management is somewhat different, the system of milk agencies prevailing. The agents purchase in the border towns of Massachusetts and New Hampshire large quantities of the farmers at a very low price, which, arriving at Charlestown and East Cambridge in the forenoon by the special milk trains, is furnished by them to the wholesale milk dealers and carriers. These convey it the same afternoon and following morning to their customers, both retail shops and private families. Probably very few persons have any correct idea of the large amount of milk which

is brought to this city every day by these various routes, or of the capital and number of persons employed in this business. Since 1859 there have been registered at the office of Mr. Faxon, City Inspector, the names of 416 wholesale dealers, that is, persons employed in carrying milk either from the railroads or the adjoining towns to their customers within the city, some of whom require several carts for this purpose. The amount conveyed by each individual varies very much from the one or two cans by the Irishman who owns a single cow in South Boston, up to the large dealer who takes 100 or 200 cans daily from the milk-trains. From 20 to 35 cans is the average number of the out-of-town dealers. The daily consumption, and the sources which supply it, may be estimated as follows:—Worcester Railroad, 1,400 cans; Eastern Railroad, 50; Boston and Maine, 150; Lowell, 710; Fitchburg, 2,475; country carts, 2,215; in all, 7,000 cans. Although a small portion of this milk goes to Charlestown and other places, still, as nearly as can be ascertained, 16,000 gallons, or 64,000 quarts, may be set down as the daily consumption of Boston, which in one year amounts to 5,840,000 gallons. This amount requires that 10,000 cows at least should be kept for the sole use of the city, and represents an annual cost to its consumers of more than one million dollars.

When we consider, therefore, the extent of the traffic, the number of persons through whose hands it passes, each of whom expects to realize a profit from the next party, the character of some of those engaged in the business, the deficient supply at certain seasons, the cheapness and abundance of water, its ready power of mingling with milk, and the difficulty of detecting its presence there by any simple process, it will be easily understood how a specimen may be watered three or four times between the udder of the cow and the mouth that drinks it. There are undoubtedly as many honest dealers in this as in any other business of a liquid nature, but we fear that the consciences of very many of them are gauged below the standard of a mere pint of water to the can, especially when the supply doesn't hold out. We believe that, as a rule, the farmers sell good milk, but there is always a suspicion that milk which has already paid three or four profits, and is then offered for sale at retail for four cents a quart, will be found to contain a larger proportion of water than nature ever intended it should. We have heard the excuse offered that as long as water only is added, and the price thus is brought within the reach of the poor, no great harm is done, and undoubtedly many parties act thus without thinking themselves guilty of any great offence; but it would certainly be more economical for the poor woman to pay a cent or two more for pure milk, and add her water at pleasure afterwards. There are other considerations, however. Nature always manufactures her fluids in accordance with the most approved rules of chemistry, and any attempts to improve upon her generally cause trouble. Milk is a very complex substance, and at best requires delicate attention to preserve it as such, even for a short time, so that any disturbance of the equilibrium existing between the relative proportions of its elements hastens those chemical processes which generate lactic acid, or, in other words, convert it into sour milk. Milk adulterated with water, therefore, is milk no longer; and although the agent thus employed is by itself harmless, its use in this way is none the less a

grave offence both against the health and the pocket of the community.

Adulteration, as practised in Boston and vicinity, consists generally in the addition of water alone, although not unfrequently a little burnt sugar is added to restore the color, and common salt to bring up the specific gravity of the specimen to the normal standard. In one instance only have we found any solid foreign substance, and in that case corn starch was used to thicken and color the specimen. The cases which are complained of are found to contain in 100 parts from 20 to 50 measures of water intentionally added. In one instance only have we found the water of adulteration to exceed this proportion, and almost always analysis shows that there is a standard system adopted by such dealers, and that such specimens contain either 25, 33 or 50 per cent. of water, and there is no doubt that the prices are arranged between the dealers accordingly.

We have thus endeavored to place before the public eye the frauds practised in the milk trade, and the amount of protection afforded by the present law. There is a plain duty for the Legislature, the city, and the individual to perform. The former should enact a law which shall make the path of the prosecuting officer easier and of the fraudulent dealer harder; the city should enforce a more stringent ordinance and refuse a license to every person twice found *carrying* adulterated milk; and every citizen should insist upon and aid in the enforcement of measures so important to the public health.

SOCIAL MEETING OF THE MEDICAL CLASS AT THE REVERE HOUSE.—An entertainment, the second of the season, was given on Friday evening last by the Medical Faculty, at which the students and many of the physicians of the city were present. We could but think, as we saw the long suite of rooms filled with the numerous guests, how great a change has taken place in the Medical Department of the University within a short time. Even half a dozen years ago the private parlors of the professors were found quite large enough to accommodate the classes which then assembled here for the lecture season. A very pleasant feature of the occasion was the presence of several of the professors in other departments of the University, which, we hope, is the commencement of a more intimate intercourse between Alma Mater herself and her offspring this side the Charles. We have barely space to allude to the high musical talent and cultivation exhibited by several members of the class.

MASSACHUSETTS GENERAL HOSPITAL.—Dr. William J. Dale has been compelled, by the pressure of his duties as Surgeon-General of the State, to resign the office which he has so ably filled for the past twelve years, of State Trustee of the Massachusetts General Hospital. Occupying a position of peculiar delicacy, giving him supervision of a number of his professional brethren, Dr. Dale has performed the responsible duties of his office with so much delicacy, and yet with so much fidelity, as to make all parties feel that his sympathies were fully with them in all that was calculated to promote the highest humanitarian and professional interests of the Institution. He retires from office with the sincere regret of all the gentlemen who have been in any way associated with him in its management. Harrison Ritchie, Esq., of

Boston, has been appointed by the Governor and Council as his successor.

REPORTS OF ASYLUMS FOR THE INSANE.—From the admirable Annual Report of Dr. Ray, Superintendent of the Butler Hospital at Providence, we extract the following numerical statement:—

"On the 31st of December, 1861, there were in the house 135 patients—69 males and 66 females. During the year there were admitted 36—16 males and 20 females; making the whole number under care, 171. There have been discharged 39—20 males and 19 females; leaving, on the 31st of December, 1862, 132. Of those discharged, 17 had recovered; 7 had improved; 10 were unimproved, and 5 died."

The following is taken from the long and valuable report of Dr. Gundry, Medical Superintendent of the Southern Ohio Lunatic Asylum:—

"There were remaining in the Asylum on 1st November, 1861, 159—78 males and 81 females. There were admitted during the year ending Oct. 31st, 1862, 92—44 males and 48 females. Number under treatment during the year, 251—males 122, females 129. There were discharged as recovered, 61—28 males and 33 females; improved, 11—5 males and 6 females; unimproved, 7—5 males and 2 females; died, 11—8 males and 3 females. Remaining in Asylum on 1st November, 1862, 161—males 76, females 85."

We have received from Mr. Patten, Druggist, specimens of Robins's water-proof surgeons' adhesive plaster, which appears to possess valuable properties. It only requires moistening to adhere closely, and may be applied equally well at all seasons, and upon wet surfaces and wounds which require frequent washing. It is evenly spread upon sheets ten inches wide and a yard in length, and is put up in tin boxes. It is also spread on silk of one half the above width.

MORTALITY IN COAL MINES.—A correspondent of the *London Times* calls attention to the frightful casualties in coal mines:—

"In the ten years, ending with the year before last, upwards of nine thousand lives were lost in our collieries. Our coal mines cost us every two years almost as many lives as were lost at Waterloo by British and Hanoverians together. We read of whole battalions crushed and squadrons annihilated, but the simple fact is, that in two regiments only, out of the whole army, did the number of rank and file killed exceed 100. The 27th lost 103 men, and the 3d battalion of the 1st Foot Guards 101. Those were the highest returns. The Scots Greys, represented by our French informants as utterly destroyed, and who really were most fiercely engaged, lost 96 men. The casualties among the officers were, of course, in proportion, but they would add little to the totals. The entire list of the killed on June 18, amounts to 2047. If we now just repeat, that between 900 and 1000 men are destroyed by violence every year in our coal mines, we shall have done enough to show what such figures mean."

Explosions of fire-damp, caused by the use of powder for blasting, are the main causes of this great slaughter.—*Med. Times and Gaz.*

POWERFUL OXIDIZING MIXTURE.—Böttger calls attention to a remarkable property possessed by a mixture of oil of vitriol and permanganate of potash, which furnishes one of the most powerful oxidizing agents hitherto discovered. Ether, alcohol, essential oils, and other inflammable substances are fired by simple contact; sulphur is oxidized to sulphuric acid with a rustling noise. The mixture is prepared with two parts of the permanganate and three parts of the oil of vitriol. If a small portion be placed in a flask, the contained air is constantly ozonized.—*Pharmaceutical Journal*.

The New York State Medical Society, at its late session, recommended that the American Medical Association should hold its annual meetings, notwithstanding the present war. We have on other occasions urged the importance of maintaining the integrity of the National Association by holding its regular sessions, and in this we have lent expression to the opinion of the profession of this State. But in other quarters there is strong opposition to the call of another meeting until the war is concluded, and this opposition controls the action of the local committee. We do not, therefore, anticipate a meeting this year.—*American Medical Times*.

APPOINTMENT.—Dr. Benjamin S. Shaw, Superintendent of the Massachusetts General Hospital, has been appointed Medical Examiner to the Pension Bureau.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, FEBRUARY 21ST, 1863.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	39	44	83
Ave. mortality of corresponding weeks for ten years, 1853—1863,	40.8	37.6	78.4
Average corrected to increased population	00	00	89.28
Death of persons above 90	0	0	0

Mortality from Prevailing Diseases.

Phthisis.	Croup.	Scar. Fev.	Pneumon.	Variola.	Dysentery.	Typ. Fever.	Diphtheria.
15	5	3	1	0	1	2	2

TO CORRESPONDENTS.—Received, Circular Letter from the Surgeon-General U.S.A.—Letter from Dr. G. T. Fisher, Sing Sing, N. Y.—Letter from Dr. W. G. Bruce, Ass. Surg. U.S.N.—Letter from Dr. Thomas T. Smiley, Memphis, Tenn.

BOOKS AND PAMPHLETS RECEIVED.—Principles and Practice of Surgery, &c., by Henry W. Smith, M.D., Philadelphia. (From J. B. Lippincott & Co.)—Report of the Commissioners of Pensions. (From Dr. G. S. Jones.)—Reports of the Trustees and Superintendent of the Butler Hospital for the Insane for 1862.

MARRIED.—At Brooklyn, N. Y., Feb. 19th, Dr. C. C. Jewett, Surgeon of the 16th Mass. Regiment (late of Holliston), to Miss Annie S., only daughter of James Freeland, of B.

DIED.—In this city, Feb. 23d, Dr. David Osgood, aged 69 years.—At St. Croix, West Indies, Jan. 20th, J. Edwards Leavitt, M.D., of New York, 36.

DEATHS IN BOSTON for the week ending Saturday noon, Feb. 21st, 83. Males, 39—Females, 44.—Abscess (of liver), 1—accident, 1—anaemia, 1—apoplexy, 2—congestion of the brain, 3—disease of the brain, 2—inflammation of the brain, 1—bronchitis, 2—cancer, 4—consumption, 15—convulsions, 2—croup, 5—cystitis, 1—diarrhoea, 2—diphtheria, 2—dropsy, 1—dropsy of the brain, 7—drowned, 2—dysentery, 1—scarlet fever, 3—typhoid fever, 2—disease of the heart, 2—infantile disease, 3—jaundice, 1—disease of the kidneys, 1—congestion of the lungs, 1—inflammation of the lungs, 1—marasmus, 2—old age, 3—paralysis, 2—pleurisy, 1—ulcer, (phagedenic), 1—unknown, 5.

Under 5 years of age, 32—between 5 and 20 years, 12—between 20 and 40 years, 15—between 40 and 60 years, 15—above 60 years, 9. Born in the United States, 57—Ireland, 17—other places, 9.